

## **AMENDMENTS TO THE SPECIFICATION**

**Applicants request that the following paragraphs in the specification be amended as follows:**

**1) The paragraph beginning on page 6, line 14:**

Referring now to **Figure 1**, wherein a block diagram illustrating an overview of the present invention in the context of an application generator incorporated with the teachings of the present invention, in accordance with one embodiment, is shown. As illustrated, application generator **102** includes in particular input component **104** associated with a data processing operation, and SQL statement generator **106**. In accordance with inputs received from an application developer user, application generator **102** generates applications **108**. Included among applications **108** are SQL statements **110**. SQL statements **110** include ~~Create~~CREATE statements for use by applications **108** to create various tables **116** having a plurality of table fields (or simply fields) to store data, inside relational database **114**, through relational database management system **112**. SQL statements **110** also include SELECT statements for use by applications **108** to access created tables **116** for the stored data of the various fields (through relational database management system **112**). As needed, SQL statements **110** may also include INSERT, UPDATE, DELETE and other statements.

**2) The paragraph beginning on page 7, line 23:**

Further, in one embodiment, the second aspect is practiced in conjunction with the earlier described first aspect. That is, upon ~~assisted~~assistance of an application developer user in selecting the fields, including looked-up fields, for use in a data processing operation, SQL statements, such as SELECT, INSERT, UPDATE and DELETE statements, with appropriate JOIN clauses, are generated.

**3) The paragraph beginning on page 8, line 12:**

Similarly, except ~~of the~~for the fact that applications **108** ~~are being the~~beneficiary-beneficiaries of the present invention, i.e. having selected ones of their SQL statements with their appropriate JOIN clauses automatically generated, applications **108**, relational database management system **112** and relational databases **114** all represent a wide range of these elements known in the art. In particular, relational database management system **112** may e.g. be the SQL Server offered by Microsoft, Inc. of Redmond, WA, Oracle Database Management System offered by Oracle Inc of Redwood City, CA, Database2 (DB2) offered by IBM of Armonk, N.Y. or other relational database management systems (RDBMS) of the like.

**4) The paragraph beginning on page 8, line 23:**

Turning now to **Figure 2**, wherein the multi-part looked-up table field of the present invention, and the relationship between the various parts to the basis and target tables, in accordance with one embodiment, is illustrated. As shown, for the embodiment, the multi-part looked-up table field of the present invention is expressed in two parts, a first part **222** corresponding to the look-up field **204** in a basis table **202** (also referred to as a foreign key of the table), and a second part **226** corresponding to the looked-up field **224-214** in a target table **212** (also referred to as a primary key **213** of the table), concatenated to first part **222** using a special character **226-224** (e.g. ":"), For examples,

- 1) a "customer description" field (to be looked up) may be expressed under the present invention in the form of customer\_id:customer\_description,
  - 2) a "product description" field (to be looked up) may be expressed under the present invention in the form of product\_id:product\_description, or
- an "employee name" field (to be looked up) may be expressed under the present invention in the form of employee\_id:employee\_name. —As alluded to earlier

and illustrated, the corresponding look-up field 204 (or foreign key) is a member of a "basis" table 202, whereas the corresponding looked-up field 214 (or primary key) is a member of a "target" table ~~204~~table 212. Of course, each ~~table 202 or 204~~table 202 or 212 may comprise other fields 206 and 216.

**5) The paragraph beginning on page 9, line 20:**

In one embodiment, multiple conjunctions are employed, with one conjunction, such as ":" denoting an Outer JOIN, and another conjunction such as "::" denoting an Inner JOIN. In other embodiments, additional conjunction denoting other types of ~~joins~~JOINS, such as a Union JOIN may also be practiced.

**6) The paragraph beginning on page 11, line 13:**

Thereafter, upon identifying the respective tables of which the standard (non-looked-up) and looked-up fields are members, as described earlier, generator 106 automatically generates a functional equivalent SQL SELECT statement, enumerating the fields to be selected, a ~~From~~FROM clause, the basis table, and where applicable, the JOIN clauses and the target tables, as well as the associated ON clauses including the condition governing the joining of the rows of the joined tables, block 312.

**7) The paragraph beginning on page 13, line 23:**

In one embodiment, the collected information is ~~subsequent~~subsequently provided to SQL generator 106 to automatically generate a functional equivalent SQL SELECT statement, including in particular, the appropriate JOIN and ON clauses.

**8) The paragraph beginning on page 14, line 7:**

**Figure 6** illustrates an example computer system suitable for use to practice the present invention in accordance with one embodiment. As shown, computer system **600** includes one or more processors **602** and system memory **604**. Additionally, computer system **600** includes mass storage devices **606** (such as diskette, hard drive, CDROM and so forth), input/output devices **608** (such as keyboard, cursor control and so forth) and communication interfaces **610** (such as network interface cards, modems and so forth). The elements are coupled to each other via system bus **612**, which represents one or more buses. In the case of multiple buses, they are bridged by one or more bus bridges (not shown). Each of these elements performs its conventional functions known in the art. In particular, system memory **604** and mass storage **606** are employed to store a working copy and a permanent copy of the programming instructions implementing the software components **614a, 614b** (e.g. input component **104** and/or SQL statement generator **106**) incorporated with the teachings of the present invention. The permanent copy of the programming instructions may be loaded into mass storage **606** in the factory, or in the field, as described earlier, through a distribution medium (not shown) or through communication interface **610** (from a distribution server (not shown)). The constitution of these elements **602-612** are known, and accordingly will not be further described.